243 only a few watchers are necessary. A pine
221 tree some 20 feet high is trimmed and set
674 firmly in the ground. The watchers climb this and spend hours standing uncomfortably in the crotches left by trimming the branches. Often several families may cooperate in watching, or several landowners may hire watchers, called *veladores*.

243 When the ears are well formed, but while
246 stalks and leaves are still green, fodder ("*rastrojo*") is cut. All stalks without ears, and the ear-bearing stalks above the ears, are cut, dried, carried to the house, and stored in sheds. This forms the principal fodder for animals. The stalks remaining in the field are not cut after the harvest, but animals are allowed to graze the harvested fields.

243 The main work of harvesting is done by men.
[462] Women bring food to the men, and they also glean, assisted by children. At harvest each man takes two rows at a time. The ears are picked, husked, and thrown in a round cane-
[482] splint burden basket (šundis) carried on the
[285] back with the aid of a tumpline. Ears which miss the basket belong to the gleaners, who also take the nubbins. When the basket is filled, the corn is piled at convenient spots.

243 The harvest is the busiest time of year.
464 Except for a few specialists, the sick, and the
466 infirm, everyone works, either on his own harvest or as a laborer for someone else. Labor also comes from other towns. Wages are 40 to 50 centavos a day, plus the right to glean. Women and children follow the men of their own household and close supervision is necessary in order to prevent too many ears from being dropped or overlooked. The workday is about 7 hours. The larger landowners have tried unsuccessfully to eliminate gleaning by raising wages to 1 peso a day. Men refused to work without gleaning rights, despite the opinion of most objective observers that the maize secured from gleaning had less value than the additional wages. The landowners would have saved through eliminating supervisors. When the harvest is over, some farmers treat all their help to a few drinks of *aguardicnte* (čaránda).

243 Most of the harvest is carried to town and
492 the storehouses on burros. Nets are used to
[493] hold the ears. Sometimes other animals are used, and for some fields employment of two-wheeled oxcarts is possible, although they are rarely used.

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34
[p.346] Sierra Tarascans

939 Both men had arrived with the highway construction crews; neither was making what he regarded as a satisfactory living and both hoped to leave.

Tile and brick are made in an old chapel and surrounding grounds, formerly part of the *curato* or curacy. Ten percent of the finished [427] tile or brick is given to the *municipio* as rent [632] for the buildings and for the right to dig clay on public lands.

A grayish clay is brought to the factory in sacks by mules. It is mixed with water and manure in a board-lined pit in the patio, where it is turned with spades and hoes and trodden with bare feet. The mixed clay is pressed into a trapezoidal wooden form laid flat on a table (fig. 5). The top is smoothed carefully with the wet hand. The clay is then slipped off the table onto a wooden form resembling half of a truncated cone, but with a handle. After a few moments, the clay, now in the shape of a tile, is slipped off on the floor. When fairly well dried, the tile is moved outdoors for further drying.

Bricks are made in the same fashion but with a different wooden form. Both brick and tile are fired in a wood-fired kiln in the patio. The wood is cut and hauled by the brickmakers and tilemakers. The time required to make a thousand brick or tile is about 9 days, as follows:

| | Days |
|---|---|
| Getting and mixing clay | 2 |
| Cutting and hauling wood | 1 |
| Shaping 1,000 brick or tile | 5 |
| Loading kiln | 1 |
| Total | 9 |

## TEXTILES

285 *Mats.*—Most sleeping mats used in Cherán are imported, but at least three women make [438] them locally. The mats are made of tules imported on burros from Erongaricuaro on Lake Pátzcuaro. The mats are made in twilled technique, usually treating two tules as a single weaving element. The only tool observed was [412] a stone fist hatchet for severing tules.

294 439 *Hat making.*—About four men manufacture men's hats of palm straw braid, although production does not meet the local demand. The activity involves complex trading arrangements, for palms do not grow in Tarascan terri-

*Production:*

333 Less than 1 meter to nearly 2 meters a day

433 *Price:*

434 From 80 centavos a meter to $1.25; about $1 a meter seemed most common

[435] *Average return:*

From 80 centavos to $1.50 seems common

*Comment:* Essentially the mason's wage is clear profit. Replacement of tools is undoubtedly a minor factor. Attractive as the wage is, a mason is idle much of the time. It is doubtful if masons earn enough to live on without also farming or working as laborers. Some masons are also butchers, plasterers, or *tejamanil* makers.

*Stonecutting:*

324 *Tools:*

433 2-pound iron mallet

434 Chisels

Calipers (value unknown)

*Labor:*

*Nixtamal* grinding stones (pair)....3 days

Door bases (pair).....1 week

*Sales price (gross profit):*

[435] *Nixtamal* grinding stones (pair)..... $9

Door bases and sills (each).....10

*Comment:* The figures suggest a $3 a day gross income, but stonecutters work only to order and do not work regularly.

## TEXTILE MANUFACTURE

295 *Tule mats:*

433 *Costs:*

434

| | |
|---|---|
| Tules at Erongaricuaro, per bundle | $0.25 |
| Rent of burro, 3 days | 1.00 |
| Total cost of 10 bundles of tules (1 burro load) | 3.50 |

| *Labor:* | Days |
|---|---|
| Getting tules | 3 |
| Weaving 13 mats | 6½ |
| Selling mats | 2½–3 |
| Average total time | 12 |

[435]

| | |
|---|---|
| Sales price at 60 centavos each | $7.80 |
| Gross profit | 4.30 |
| Daily profit per worker | .35 plus |

*Comment:* Except for one woman, mat making is a side line and only one a day is woven. The figures given above represent the single case where a woman spends all her time at mat weaving. Actually, this woman has a slightly higher income, as her mother buys the tules. On the other hand, two people are supported by the work, for the weaver has to rely on the mother to perform most of the household duties.

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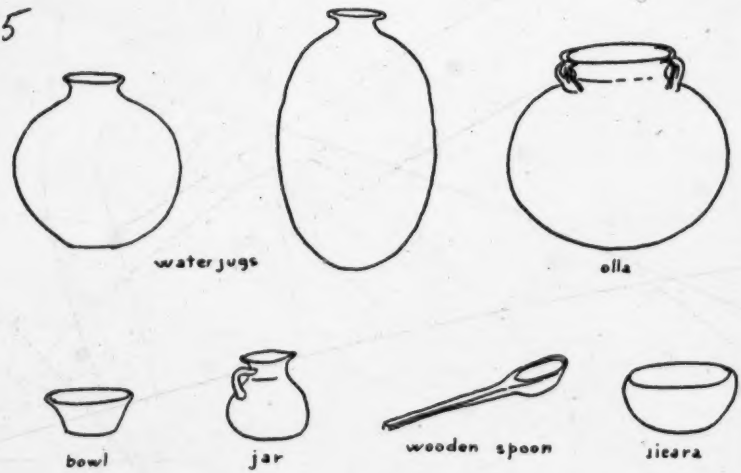


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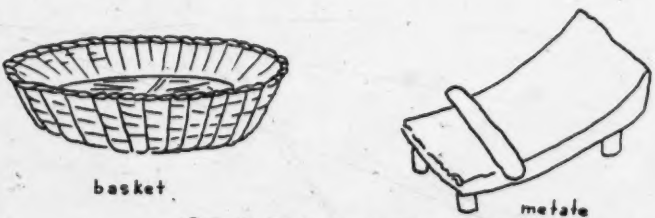


FIGURE 17.—Utensils commonly found in a Cherán kitchen.

[p. 23]

294 438 *trenzas*. In practically every Tarascan pueblo women, children, and sometimes men weave *trenzas* in their spare time, while walking to and from market, and while herding sheep. Braids are sold in the main markets, where they are purchased by hat makers. Little wheat straw is now braided, palm leaf being more durable and more easily handled.[147] After they are pressed and straightened with wooden rollers (fashioned like a clothes wringer), the braids are sewed together in spiral form, beginning at the crown. The brim and crown are made separately and sewed together. In Jarácuaro wooden forms are used to block crowns. Most hatters employ a Singer sewing machine, but those of Urapicho, Pamatácuaro, and Zacán sew by hand. In some towns hat making is disappearing, owing largely to factory competition. Pichátaro, formerly an important hat town, now has but four hatters. In 1936 the industry disappeared completely in Tiríndaro.

285 438 **Tule weaving.**—The indigenous sleeping mat or *petate* (k'uírakua) is found in most of highland Mexico. Also, the fire fan or *soplador* (p'unítatarákua), an indispensable kitchen utensil, is woven of tule. Mats and fire fans are made wherever tule is available—along the shores of shallow lakes, marshy areas, and river banks. Consequently, the villagers living around Lake Pátzcuaro are the chief tule weavers in the present Tarascan area (map 20; pl. 12). In San Andrés 90 percent of the working population make *petates*. Even a few families in the Sierra towns of Pichátaro and Cherán fabricate mats from tule reeds imported from Erongarícuaro. Formerly the towns near the northern marsh[1] districts were important *petate* producers, but there the industry has greatly declined with the desiccation of wet areas and disappearance of the tule brakes.[148] Tule is likewise being depleted along the shores of Lake Pátzcuaro. The *petateros* of Puácuaro, Napízaro, and Uricho import reeds from Jarácuaro Island, the local supply having been exhausted years ago.

Tule reeds are cut with the sickle, semidried, and bundled for transport or storage (pl. 8). In

[147] Hats of wheat straw are now made only in Pamatácuaro, Tarerneda, and Apo (mestizo).

[148] A few *petates* are still made in Tarascan Tarejero, on the border of the former Zacapu marshes; in mestizo Etúcuaro (Tangancícuaro Basin); and in Tacátacuaro (near the Cotija graben lakes). Moreover, the industry is still carried on in some of the Lerma Delta towns east of Lake Chapala, and in a few villages around Lake Cuitzeo.

[1] [probably should read 'marsh'.—Analyst]

285 438 the Lake area a twilled technique is used in mat making, which is performed on the ground, the only tools being a knife or sharp stone to cut tule stalks and a wooden mallet to flatten the reeds as they are twilled. Several sizes of mats are made; the largest, called simply k'uírakua-k'éri, measures 1.5 by 1 m.[148] Both mats and fire fans are taken to the Lake markets (Pátzcuaro, Erongarícuaro, Quiroga), where they are purchased by the Sierra people and buyers from the *tierra caliente*.

**Basketry.**—Ihuatzio and San Jerónimo in the Lake area are the only modern Tarascan towns in which baskets are made. The former Tarascan towns of Tangamandapio (west of Zamora) and Panindícuaro (north of Zacapu) are the main basket centers in the general area, supplying the Sierra people with the šúndiča, or harvest baskets for maize. The Ihuatzio baskets are made of split carrizo stalks, which grow in abundance in local house lots. Both wicker and twilling techniques are used (pl. 12).

286 438 **Netting.**—In all fishing villages around Lake Pátzcuaro nets are made by men, women, and children in their spare time. On Janitzio and the Urandén Islands a few professional *rederos* fabricate nets to sell to fishers in other pueblos. Cotton [283] thread purchased in Pátzcuaro is wound on the *hilador* (šoróranskua) and five to six strands are twisted with the native malacate or with the European spinning wheel. The twisted strands are water-soaked and sun-dried. Nets are made with the čurúkua, a large wooden needle (20 cm. long, 2 cm. wide).

294 [171] **Capote making.**—In many parts of indigenous Mexico the palm-leaf raincape (*capote*), similar to those worn in the Orient, is a common outdoor apparel during the wet season. *Capotes* are made [438] by women in three Tarascan towns—Quinceo, Arantepacua, and Turicuaro—using leaves of the *palma pimu* (*Acoelorraphe pimo*), which are im- [439] ported from the *tierra caliente* below Ario de Rosales.[149] The capes are fabricated by tying soaked strips of palm leaf onto braided cords, two of which are stretched parallel and one foot apart on pegs driven into the ground. The strips of

[TEXT CONTINUES TOP OF P 67a]

[148] Other types: The k'amáriča (1.3 m.×30 cm.) and the tímanitspémuča (1 m.×30 cm.), both used for sleeping; the jatápetakua, a small knee mat; šúčiča, a long, narrow mat sold to mestizos as a sort of rug. Many more sizes and varieties occur, the names and types varying from place to place. The terms and types given above were observed in Ihuatzio and some of the ranchos along the shore of the Tarío-k'éri Peninsula.

[149] Most of the palm leaves used in Arantepacua are said to come from the localities of Rosario, La Playa, Charapendo, and San Marcos, south of Ario.

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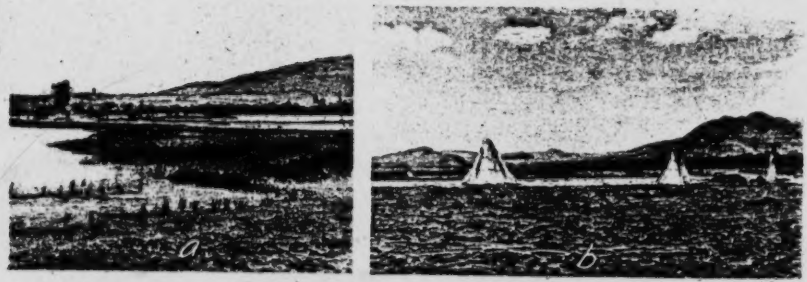

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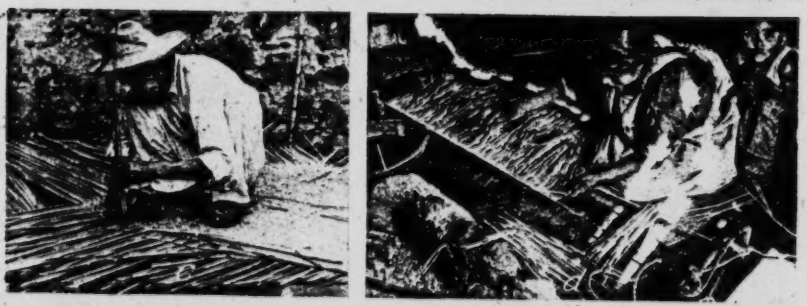

[531]

[415]

PLATE 12.—Textiles. *a*, A milpa of tule along the shore of Lake Pátzcuaro, between San Jerónimo and San Andrés. Many petate makers own their own milpas, but sometimes portions of the brakes are leased to tule sellers, who harvest the reeds and distribute them to various villages around the lake. *b*, Harvesting tule, Jarácuaro Island, Lake Pátzcuaro. After partially drying in the sun, the reeds are bundled into sheaves and stacked in shocks. *c*, Weaving petates, Ihuatzio. Note the wooden mallet on the mat near the man's hands. *d*, Making zapotes, Aranza zacua. Work is done inside the kitchen. Note the hearth, lower left. Palm leaves are kept moist by dipping them in the bebe of water at left. *e*, Embroidering a huipil, or blouse, Tzurumútaro. *f*, Baskets woven at Ihuatzio. The large one (left), called *tuite*, is used to carry bread and fruit. It is usually transported on the back in the *ayate*. The flat round basket is called *p'akáta* and is used to carry fish and tamales. The twilled basket is a *tlacal* (the Tzurumútaro call it "*tacáta*") for tortillas. The handled basket at the right (simply named "*tzinacúa*") is for carrying eggs, pinoncillo, and often fish.

[End-plate 12]